



Forest Health Protection Pacific Southwest Region



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To: Patricia Grantham, Forest Supervisor, Klamath National Forest

Subject: Craggy Project

A site visit was made to the Craggy Project, Klamath National Forest, on May 30, 2019. The objectives were to assess the current insect and disease conditions.

Background

The Craggy Project area was first visited June 5, 2012 with Roger Siemers, Carl Varak, Dave Burgess, Jenny Bennet, and Austin Navarez. None of these currently work on the Forest. At that visit, The Craggy project area consisted of natural stands and 3,270 acres of plantations, established after the 1955 Haystack Burn, in the Humbug drainage. The District wanted to retain the natural stands in their current mid- to late-seral stages and thin plantations to retain for 20-30 years when they would return for regeneration harvest. The project area encompasses a 100-acre LSR which is currently recommended as critical habitat. The Humbug drainage also encompasses the Humbug WUI and several permanent home sites. 2,500 acres of plantations were terraced in the 1960's after original reforestation was not successful. Many more similar acres are within the project area, but not easily accessible. An OHV use area developed and has gained a lot of use. Plantations averaged 12-14 inches DBH with basal areas over 200. Natural stands ranged 7-18 inches DBH with basal areas well over 200 with primarily ponderosa pine, Douglas-fir, and incense cedar. Growth was slowing and the tops of the pines were starting to round off.

One group of plantation stands that was visited in 2012 had scattered pockets of ponderosa pine mortality, 15-20 trees each, caused by western pine beetle (Figure 1). These stands had an average age of 60 years, basal area of 180-220, and average diameter of about 12-18 inches. These stands were adjacent to a similar stands that were thinned in the 1990's which seemed to have less mortality. This visit was at the beginning of the extended drought of 2010-2016 and the mortality seemed to be primarily density-driven. I suggested that thinning was the best option to get the residual trees to a more vigorous state where they would be better able to defend themselves against the bark beetles. I recommended dropping the basal area to below 100 in the plantations.

This group of plantations was revisited in 2019.

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Figure 1. Western pine beetle-caused ponderosa pine mortality in Craggy plantations, June 5, 2012.

Observations

The Craggy Project was revised and from the original in 2012 and selected in 2018 to receive \$5.2 million as a part of CAL FIRE's Forest Health California Climate Investments Grant Program. The Craggy Vegetation Project was developed in conjunction with CAL FIRE and the Yreka Fire Safe Council to improve fire resilience and forest health conditions on National Forest lands adjacent to the communities of Yreka and Hawkinsville. Project actions were also designed in cooperation with the National Fish and Wildlife Foundation to improve watershed conditions and enhance habitat for deer, wild turkey, and sensitive plant species found in the area. The project will treat approximately 11,310 acres within the 29,500 acre project area.

On the 2019 visit, I observed continued mortality in the pine plantations. When asked about the effect the past few years since the drought was declared "over", I noted that after a severe and extended drought, trees may take up to 2-4 years to recover and regain vigor sufficient to defend against bark beetle attack. The current attacks are fewer than the attacks noted in 2012, but the 2017 water year was actually quite dry. Trees that were not yet responding to the increased water in the 2016 water year continued to be stressed. These trees actually died in the 2018 water year prior to the winter snow and rain. This last winter provided a great boost to these trees defenses, but density continues to drive higher than normal levels of tree mortality.

Discussion

The project uses the Good Neighbor Authority to improve defensibility to wildfire while improving fire resiliency. Reducing forest fuels and forest density resulting in increased carbon sequestration, improved resilience to large disturbances such as wildfire and/or bark beetle outbreak that are anticipated to occur if no action is taken. The project works with the Yreka Fire Safe Council and supports the purpose and intent of the Community Wildfire Protection Plan (CWPP). The fire safe council has identified an additional 1,330 acres of fuels treatments adjacent to the communities of Yreka and Hawkinsville on private lands that will supplement the Craggy Project treatments. The combined actions on Federal and Private lands would meet the goals and standards of treatment within the Wildland Urban Interface to reduce wildfire flame lengths to less than four feet, which decreases threats to communities and damaging fire effects, and allows for effective fire suppression. Results of treatments is expected to have positive effects far outside the treatment units.

If you have any questions regarding this report and/or need additional information, please contact Cynthia Snyder at 530-226-2437.

/s/ Cynthia Snyder

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